

(9a)

$$i \geq 0$$

$$b_{i+4} = \frac{1}{(i+3)(i+4)} \cdot \left\{ \sum_0^i z^{-j-1} b_{i-j} - (2i+6)a_{i+3} \right\}.$$

(ii) Consider the equation for parabolic cylinder functions

$$(1b) \quad \frac{d^2x}{dt^2} - \left(z + \frac{t^2}{4} \right) x = 0, \quad |z| \leq \xi < \infty,$$

and its "limiting" equation as $z \rightarrow 0$,

$$\frac{d^2y}{dt^2} - \frac{t^2}{4} y = 0$$

whose general solution is

$$(5b) \quad y(t) = t \left\{ c_1 I_{1/4} \left(\frac{t^2}{4} \right) + c_2 I_{-1/4} \left(\frac{t^2}{4} \right) \right\}.$$

Our theorem furnishes the representation

$$(6b) \quad x(t, z) = f(t, z)y(t) + g(t, z)dy(t)/dt$$

PALEONTOLOGY.—New names for two foraminiferal homonyms. ALFRED R. LOEBLICH, Jr., and HELEN TAPPAN, U. S. National Museum.

Two species discussed in our recent publication *Studies of Arctic Foraminifera* are or have homonyms, as was kindly brought to our attention by Dr. Hans Thalmann. On page 68 the allocation of *Entosolenia costata* Williamson (1858, p. 9) to the genus *Oolina* places it as a homonym of *Oolina costata* Egger (1857, p. 269) from the Miocene of Bavaria. We therefore propose *Oolina borealis*, new name, for *Entosolenia costata* Williamson, 1858 (not *Oolina costata* Egger, 1857).

Furthermore, the allocation (p. 77) of *Vermiculum marginatum* Montagu (1803, p. 524) to *Fissurina* places as a homonym the species *Fissurina (Fissurine) marginata* Seguenza (1862, p. 66) from the upper Miocene of Messina, Sicily. For the species

where the functions $f(t, z), g(t, z)$ are analytic in t for all t , being expressible in the form

$$(8b) \quad \begin{aligned} f(t, z) &= \sum \alpha_i(z)t^i \equiv 1 + (z/2)t^2 + \dots \\ g(t, z) &= \sum \beta_i(z)t^i \equiv (z/3)t^3 + \dots \end{aligned}$$

where

$$\alpha_0 = 1, \quad \alpha_1 = 0, \quad \alpha_2 = z/2,$$

$$\beta_0 = \beta_1 = \beta_2 = 0,$$

$$\alpha_{i+1} = \frac{1}{(i+1)(i+2)}$$

$$\cdot [z\alpha_i - (i/2)\beta_{i-1}],$$

(9b)

$$\beta_{i+2} = \frac{1}{(i+1)(i+2)}$$

$$\cdot [z\beta_i - 2(i+1)\alpha_{i+1}],$$

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of Seguenza we are therefore proposing *Fissurina siciliensis*, new name.

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